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ABSTRACT

Within the framework of a model that defined a social network as a dynamic hierarchic structure within which individuals exchange support with one another throughout their lifetime, two studies explored the development of social support networks during childhood. In the first study, 90 children in kindergarten and grades 4 and 8 at a private school were asked to rank people they knew according to how close and supportive they were to the children. In the second study, 340 children of various racial backgrounds in grades 1, 2, 4, 5, 8, and 9 ranked people they knew utilizing an examination procedure somewhat modified from the first study. Results were similar in both studies. At all ages, support was provided by family members. Older children placed more emphasis on support from friends, and placed more individuals in their support networks, than did younger children. (MDM)

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SOCIAL NETWORKS IN CHILDHOOD AND EARLY ADOLESCENCE: STRUCTURE AND FUNCTION

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ABSTRACT

The convoy model defines the social network as a dynamic hierarchic structure within which individuals exchange support across the lifespan. Two studies were conducted to explore the development of support networks in childhood within this framework. In Study I, 90 children at three grade levels (K, 4, 8) were interviewed through an adaptation of the convoy mapping procedure. In Study II, 340 children in grades 1-2, 4-5, and 8-9 were interviewed. Test-retest reliability of the measures was established with a subsample of 49 children. The procedure is relatively simple to employ and the measures are reliable across the age ranges studied. The findings extend previous data in support of the convoy model; close family support was stable across age, but important shifts in network structure and function occurred at the transition to adolescence.

SOCIAL NETWORKS IN CHILDHOOD AND EARLY ADOLESCENCE: STRUCTURE AND FUNCTION

The convoy model defines the social network as a dynamic hierarchic structure within which individuals exchange affective, instrumental, and self-affirming support functions across the lifespan (Kahn & Antonucci, 1980). Changes in network structure and function are likely to occur particularly with major life transitions.

Two studies were conducted to explore the development of support networks in childhood within the framework of this model. The first was a preliminary study of a small private school population. The second was a larger study of children from a multi-ethnic public school population. The initial purpose of the second study was to establish the test-retest reliability of the convoy measures in a diverse sample of children. The extent to which age-related shifts in network structure and function found in Study I were replicated in study II has also been addressed. All reported findings are statistically significant.

STUDY I

METHOD

The 90 participants in Study I included 30 children at each of three grade levels (K, 4, 8) from a private school population. The children were interviewed individually at school through an adaptation of the convoy mapping procedure (Antonucci, 1986). Participants are typically asked to place individuals who are "so close that it's hard to imagine life without them" in the inner

circle of a concentric circle diagram, with those "not as close, but still important" in the middle and outer circles. The task was made more concrete by writing the name of each network person on a sticker that was then placed in the diagram (Figure 1). When the diagram was completed, the children were asked to point to each person in the network who provided each of nine support functions; i.e., people to whom they talk about things that are important, who make them feel better when they are bothered about something, to whom they talk when they are feeling sad or unhappy, who make them feel important or good about themselves, who would take care of them if they were sick, who they ask to help if they don't know what to do, who they like to be with, and who would give them money if needed.

RESULTS AND CONCLUSIONS

Network Structure. In general, older children included more persons in their networks than did younger children. The number of persons in each of three relationship categories (Close Family, Other Family, and Friends) at each grade level is represented in Figure 2. Close Family included mother, father, siblings, and grandparents. Fourth graders included more Other Family members than did those in kindergarten. Eighth graders included more friends.

The proportions in which network members were distributed by relationship category across the circle hierarchy are presented in Table 1. As with adults, at all ages, the inner circle was composed primarily of close family members; friends and other family members were found in the outer circles.

Network Function. Figure 3 illustrates the number of support functions provided by Close Family, Other Family, and Friends across age. Consistent with the convoy model, support was provided mostly by Close Family members regardless of age, but support from Friends increased markedly in early adolescence.

STUDY II

METHOD

Interviews were conducted at school with 340 African-American, Hispanic-American, and Anglo-American children in grades 1-2, 4-5, and 8-9. Reliability interviews were conducted with 49 children 1-2 weeks after the initial interview.

Based on Study I and on additional pilot work, some modifications were made in the procedures. Instructions for completing the circle diagram were altered, so that children were asked to place in the inner circle "people who are the most close and important to you--people you love the most and who love you the most." The middle circle included "people who are not quite as close, but who are still important--people you really love or like, but not quite as much as the people in the first circle." The outer circle included "people who are not as close as the others, but who are still important--people you still really love or like, but not quite as much as the people in the middle circle." The number of support functions was reduced to six (Table 2).

RESULTS AND CONCLUSIONS

Test-retest reliability. The correlations in Table 3 indicate considerable agreement with regard to the convoy measures, including the number of persons in the network, the

amount of support received from the network, and the support received specifically from Close Family, Other Family and Friends.

Network structure and function. Preliminary analyses have addressed the extent to which the Study I findings with regard to age-related changes in network structure and function would replicate in the markedly different population sampled in Study II. These analyses are for the sample as a whole, collapsing across ethnicity. The findings reported for Study I were replicated. Older children included more persons in their networks, more Other Family members were included in Grades 4-5, and 8th graders included more friends. Support was provided mostly by close family members regardless of age, but support from friends increased markedly in early adolescence.

GENERAL CONCLUSIONS

The results of these studies reflect the significance of close family relations and the emergent role of peers in the child's life. In general, the findings extend previous data in support of the convoy model; inner circle composition and function were more stable than that of the outer circles, and important shifts in network structure and function were noted across the transition to adolescence. The studies are of methodological interest because the modified hierarchical mapping procedure is consistent with that used in research with adults, is relatively simple to employ, and can be used reliably across the age ranges studied.

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Table 1

Distribution in Network Diagram by Relationship Category

Grade/ Relationship	Circle Proportion[a]		
	Inner	Middle	Outer
Kindergarten			
Close Family	.56	.17	.12
Other Family	.18	.16	.17
Friends	.23	.61	.69
Others	.03	.06	.02
Grade 4			
Close Family	.80	.17	.08
Other Family	.20	.67	.27
Friends	.00	.12	.63
Others	.00	.04	.02
Grade 8			
Close Family	.72	.18	.09
Other Family	.12	.23	.14
Friends	.15	.59	.76
Others	.01	.00	.01

[a]N in relationship category/ N in circle for first 20 persons in network.

Table 2

Support Function Questions: Study II

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1. Are there people you talk to about things that are really important to you?
2. Are there people who make you feel better when something bothers you or you are not sure about something?
3. Are there people who would take care of you if you were sick?
4. Are there people who like to be with you and do fun things with you?
5. Are there people who help you with homework or other work that you do for school?
6. Are there people who make you feel special or good about yourself?

Table 3

Test-Retest Reliability of Network Measures

Measure	G1-2	G4-5	G8-9	Total
N in Network	.78	.84	.93	.91
Total Support	.67	.72	.67	.73
Inner Circle	.71	.60	.76	.71
Middle Circle	.79	.84	.89	.80
Outer Circle	.53	.88	.93	.89
Mother	.72	.72	.75	.77
Father	.63	.76	.87	.76
Close Family	.62	.70	.61	.69
Other Relatives	.78	.84	.72	.79
Friends	.81	.92	.82	.88

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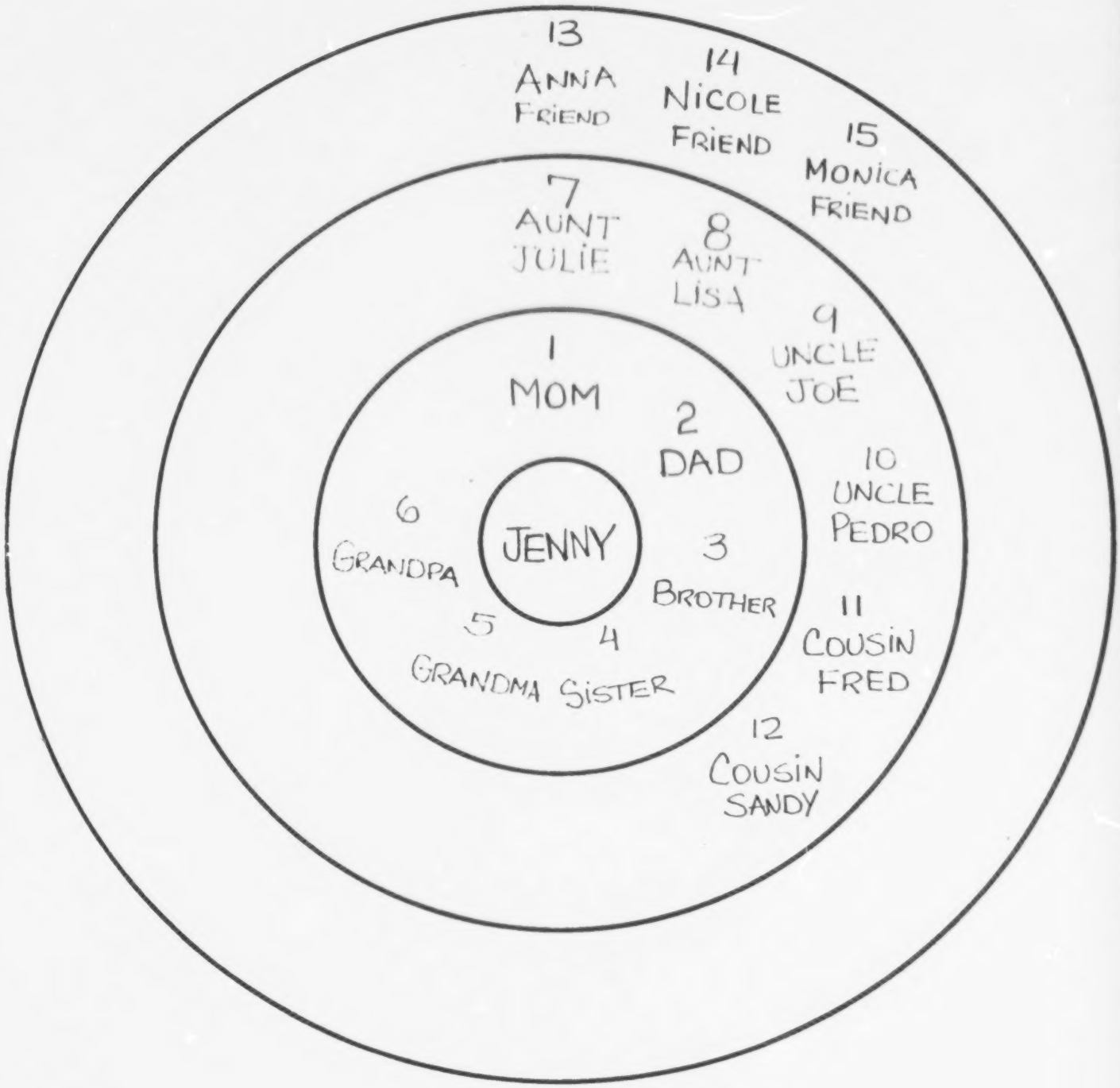
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UNCLE
JOE
1
MOM
2
DAD
10
UNCLE
PEDRO
6
GRANDPA
JENNY
3
BROTHER
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COUSIN
FRED
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GRANDMA
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SISTER
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COUSIN
SANDY

Figure 2
Network Structure by Grade Level

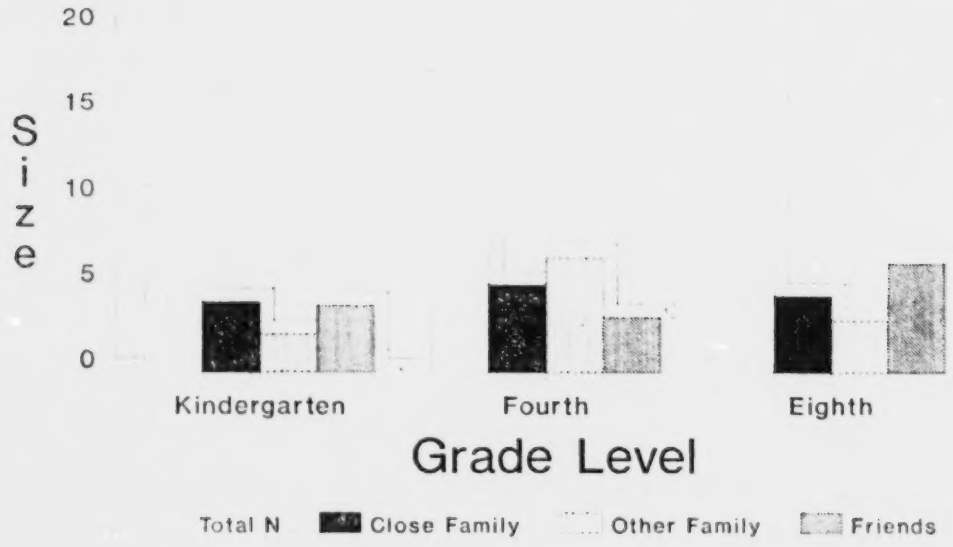

Figure 3
Network Function by Grade Level